REMARKS/ARGUMENTS

Claims 1, 3, 5-7 and 11-22 are active in this application.

The claims have been amended to define the fibrin and fibrinogen recited in parts (a) and (b) of Claim 1 as human. Support for this amendment is found throughout the specification, for example, page 3, line 4and page 13 of the application as originally filed.

No new matter is believed to have been added by these amendments.

Claims 1, 3, 5, 7, 11-18 and 22 are drawn to the elected subject matter. With respect to non-elected Claims 6 and 19-21, Applicants request rejoiner of these claims upon finding that the elected protoclaims are allowable.

There are two rejections raised under 35 U.S.C. § 112, first paragraph, one for written description and one for enablement. Each is addressed in turn below.

Written Description

The Office has determined that the written description requirement can be met by "showing that an invention is complete by disclosure of sufficiently detailed, relevant identifying characteristics ... i.e., complete or partial structure, other physical and/or chemical properties, *functional characteristics when coupled with a known or disclosed correlation between function and structure*, or some combination of such characteristics." **Guidelines for Examination of Patent Applications Under the 35 U.S.C. 112, P1, "Written Description" Requirement** *66 FR 1099* (2001).

Thus, it is clear that a partial structure can be sufficient to comply with the written description requirement, particularly when combined with other physical and/or chemical properties. In the pending application, the Applicants have clearly shown possession of human fibrin and fibrinogen and point to the specification starting at page 10, which details that the Applicants purified proteins from concentrated extracts which "are immunodetected with the AFA-positive rheumatoid sera but not with the AFA-negative

rheumatoid sera." (paged 11, last ¶). In addition on page 12, the Applicants have provided a description of a partial structure, SEQ ID NO:1, of the human fibrin molecule.

Accordingly, Applicants request that the rejection under 35 U.S.C. § 112, first paragraph (written description) be withdrawn.

Enablement

As set forth in Applicants previous remarks, the specification describes in detail how to purify citrullinated α-fibrin, obtain recombinant fibrinogen, and to test reactivity with rheumatoid arthritis-specific anti-filaggrin autoantibodies (referring to pages 3 and 6-10, pages 10-13, pages 13-14 and pages 15-17). Furthermore, as noted above, the citrullinated α-chain of human fibrinogen has been further characterized where the specification in example 2 of the present application clearly describes how to citrullinate fibrinogen by peptidyl arginine deaminase and demonstrates that the citrullination of fibrinogen facilitates its reaction with anti-filaggrin autoantibodies (see page 16, line 19 to page 1, line 29).

As further evidence that the claimed invention is enabled Applicants provided a Declaration from one of the named inventors, Dr. Guy Serre. Applicants appreciate the indication on page 4 of the Office Action that the Declaration is sufficient with respect to human fragments. Accordingly, withdrawal of the enablement rejection under ¶1 of sec.112 is requested.

Applicants request allowance of this application without further delay.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon

Daniel J. Pereira, Ph.D.
Registration No. 45,518

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)